Geologic Units and Contacts of Natural Bridges National Monument and Vicinity, Utah

Identification_Information:

Citation:

Citation Information:

Originator: National Park Service Geologic Resources Inventory (GRI) program.

Publication_Date: Unpublished Material

Title: Geologic Units and Contacts of Natural Bridges National Monument and Vicinity, Utah (NPS, GRI, NABR, NABRGLG)

Edition: 1st

Geospatial_Data_Presentation_Form: vector digital data

Larger_Work_Citation:

Citation_Information:

Originator: National Park Service Geologic Resources Inventory (GRI) program.

Publication Date: 20010301

Title: Geologic Map of Natural Bridges National Monument and Vicinity,

Utah

Description:

Abstract: The Geologic Units and Contacts of Natural Bridges National Monument and Vicinity, Utah data (NABRGLG) consists of area (polygon) geologic units and the contacts/map boundary that defines those areas (polygons). The data were completed as a component of the Geologic Resources Inventory (GRI), a co-operative program between the Natural Resources Information Division (NRID) Inventory and Monitoring Program (IM) and the Geologic Resources Division (GRD) of the National Park Service (NPS). The spatial data (coverage/theme) was produced from an .E00 coverage with area geologic units and contact arcs. The 'new' coverage/theme (NABRGLG/NABRGLGA) was attributed as per the NPS GIS-Geology Data Model. An indexed ArcInfo .E00 (export) coverage file and an ArcView 3.2 .SHP theme were then also created. The coverage/theme is within the area of interest of Natural Bridges National Monument. The coverage/theme is in NAD83, UTM Zone 12N.

Purpose: Data intended to assist NPS personnel in the protection and management of Natural Bridges National Monument.

Supplemental_Information: The Geologic Units and Contacts of Natural Bridges National Monument and Vicinity, Utah coverage/theme (NABRGLG/NABRGLGA) is a component of the Geologic Map of Natural Bridges National Monument and Vicinity, Utah. Other coverages/themes that comprise the Geologic Map of Natural Bridges National Monument and Vicinity, Utah include: NABRATD (geologic attitude observation points), NABRSEC (geologic cross section lines) and NABRUPF (unique geologic point features). Two accessory data tables, NABRGLG1 (accessory geologic unit data) and NABRMAP (source map information), are also considered map components.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20010301

Currentness_Reference: ground condition

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None planned

Spatial Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -110.050324 East Bounding Coordinate: -109.963108

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North_Bounding_Coordinate: 37.636856
      South_Bounding_Coordinate: 37.568448
  Keywords:
    Theme:
     Theme Keyword Thesaurus: none
      Theme Keyword: Natural Bridges National Monument
      Theme Keyword: Utah
      Theme_Keyword: geology
      Theme_Keyword: geologic units
      Theme_Keyword: geologic contacts
      Theme_Keyword: GLG
     Theme_Keyword: NABRGLG
      Theme_Keyword: National Park Service
      Theme_Keyword: NPS
      Theme_Keyword: Geologic Resources Inventory
      Theme_Keyword: GRI
    Place:
      Place_Keyword_Thesaurus: none
      Place_Keyword: Natural Bridges National Monument
      Place_Keyword: Utah
     Place_Keyword: United States
      Place_Keyword: US
      Place_Keyword: USA
      Place_Keyword: North America
      Place Keyword: NABR
  Access Constraints: None
  Use_Constraints: Not for use at scale greater than 1:24,000.
  Point_of_Contact:
    Contact_Information:
      Contact_Person_Primary:
        Contact_Person: Stephanie O'Meara
        Contact_Organization: Colorado State University
      Contact_Position: Research Associate, Geologist/GIS Specialist
      Contact_Address:
        Address_Type: mailing and physical address
        Address: 1201 Oak Ridge Drive, Suite 200
        City: Fort Collins
        State or Province: Colorado
        Postal_Code: 80525
        Country: USA
      Contact Voice Telephone: (970) 225-3584
      Contact_Facsimile_Telephone: (970) 225-3585
      Contact_Electronic_Mail_Address: Stephanie_O'Meara@nps.gov
     Hours of Service: 9:00 a.m. to 5:00 p.m. (MST), Monday - Friday
  Data_Set_Credit: Jaqueline E. Huntoon (Michigan Technological University).
 Native_Data_Set_Environment: Windows NT Version 4.0 (Build 1381) Service Pack
6; ESRI ArcInfo 8.1.0.415
Data_Quality_Information:
  Attribute_Accuracy:
    Attribute_Accuracy_Report: Attribution was derived from a source .E00 file.
Users of this data are advised to FULLY and CAREFULLY READ the "DISTRIBUTION
LIABILITY" section of this metadata before using the data.
 Logical_Consistency_Report: Arc 'topology' present.
  Completeness Report: Data is considered complete to the extent of the
unpublished source map.
  Positional_Accuracy:
    Horizontal_Positional_Accuracy:
```

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Horizontal_Positional_Accuracy_Report: Data is assumed to meet National Map Accuracy standards. The PRECISION of the ArcInfo coverage .E00/ArcView .SHP theme file is DOUBLE.

Lineage:

Source_Information:

Source Citation:

Citation Information:

Originator: Huntoon, Jacqueline E.

Publication Date: 2000

Title: Geologic Map of Natural Bridges National Monument and Vicinity,

Utah

Edition: 1st

Geospatial_Data_Presentation_Form: map

Other_Citation_Details: Huntoon, Jacqueline E., 2000, Geologic Map of Natural Bridges National Monument and Vicinity, Utah, Michigan Technological University, unpublished, 1:24,000 scale

Source_Scale_Denominator: 24000 Type_of_Source_Media: paper Source_Time_Period_of_Content: Time_Period_Information: Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: ground condition

Source_Citation_Abbreviation: unpublished Michigan Technological University source map (Huntoon, Jacqueline E., 2000, Geologic Map of Natural Bridges National Monument, Utah, Michigan Technological University, unpublished, 1:24,000 scale)

Source_Contribution: All geologic contact and map boundary arcs were captured (digitized) from the source map. NPS GIS-Geology Data Model attribution was derived from source attribution.

Process_Step:

Process_Description: Geologic contact and map boundary arcs were captured (digitized) from the source map. An ArcInfo coverage (NABRGLG/NABRGLGA) was created from an .E00 file with area geologic units and contacts spatial and attribute data. Coverage topology (ArcInfo BUILD command) was then constructed and NPS GIS-Geology Data Model attribute fields added (ArcInfo ADDITEM command). Data Model attribution was derived from 'inherited' attribute fields. The data were then 're-projected' (ArcInfo PROJECT command) into NAD83, UTM Zone 12N. An indexed (ArcInfo INDEX command) ArcInfo .E00 (export) coverage file and an ArcView 3.2 .SHP theme were then also created.

Source_Used_Citation_Abbreviation: Huntoon, Jacqueline E., 2000, Geologic Map of Natural Bridges National Monument and Vicinity, Utah, Michigan Technological University, unpublished, 1:24,000 scale

Process Date: 20010301

Process Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Stephanie O'Meara

Contact_Organization: Colorado State University

Contact_Position: Research Associate, Geologist/GIS Specialist

Contact_Address:

Address_Type: mailing and physical address Address: 1201 Oak Ridge Drive, Suite 200

City: Fort Collins

State_or_Province: Colorado

Postal Code: 80525

Country: USA

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```
Contact_Voice_Telephone: (970) 225-3584
          Contact_Facsimile_Telephone: (970) 225-3585
          Contact_Electronic_Mail_Address: Stephanie_O'Meara@nps.gov
          Hours_of_Service: 9:00 a.m. to 5:00 p.m. (MST), Monday - Friday
Spatial Data Organization Information:
  Direct Spatial Reference Method: Vector
  Point and Vector Object Information:
    SDTS_Terms_Description:
      SDTS_Point_and_Vector_Object_Type: Complete chain
      Point_and_Vector_Object_Count: 37
    SDTS_Terms_Description:
      SDTS_Point_and_Vector_Object_Type: Entity point
      Point_and_Vector_Object_Count: 14
    SDTS_Terms_Description:
      SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains
      Point_and_Vector_Object_Count: 14
    SDTS Terms Description:
      SDTS_Point_and_Vector_Object_Type: Point
      Point_and_Vector_Object_Count: 4
Spatial_Reference_Information:
  Horizontal_Coordinate_System_Definition:
    Planar:
     Map_Projection:
        Map_Projection_Name: Transverse Mercator
        Transverse Mercator:
          Scale_Factor_at_Central_Meridian: 0.999600
          Longitude of Central Meridian: -111.000000
          Latitude of Projection Origin: 0.0
          False_Easting: 500000.000000
          False_Northing: 0.000000
      Planar_Coordinate_Information:
        Planar_Coordinate_Encoding_Method: coordinate pair
        Coordinate_Representation:
          Abscissa_Resolution: 0.000016
          Ordinate_Resolution: 0.000016
        Planar_Distance_Units: meters
    Geodetic Model:
      Horizontal Datum Name: North American Datum of 1983
      Ellipsoid_Name: Geodetic Reference System 80
      Semi-major_Axis: 6378137.000000
     Denominator_of_Flattening_Ratio: 298.257222
Entity_and_Attribute_Information:
  Detailed_Description:
    Entity Type:
      Entity_Type_Label: nabrglg.aat/nabrglga.dbf
      Entity_Type_Definition: Geologic Contacts/Map Boundary arc attribute table
      Entity_Type_Definition_Source: ArcInfo 8.1
    Attribute:
      Attribute_Label: FID
      Attribute_Definition: Feature identification number
      Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable Domain: Unique feature identification integer
    Attribute:
     Attribute Label: SHAPE
     Attribute_Definition: Representation of the entity in the data
      Attribute Definition Source: ArcInfo 8.1
```

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Attribute_Domain_Values:
            Unrepresentable_Domain: Shape entity type
    Attribute:
      Attribute_Label: FNODE#
     Attribute Definition: Internal sequence number of the from-node
     Attribute Definition Source: ArcInfo 8.1
     Attribute Domain Values:
            Unrepresentable_Domain: Internal from-node integer
    Attribute:
     Attribute Label: TNODE#
     Attribute_Definition: Internal sequence number of the to-node
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: Internal to-node integer
    Attribute:
     Attribute Label: LPOLY#
     Attribute Definition: Internal sequence number of the left polygon
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: Internal left-polygon integer
    Attribute:
     Attribute_Label: RPOLY#
     Attribute_Definition: Internal sequence number of the right polygon
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute Domain Values:
            Unrepresentable_Domain: Internal right-polygon integer
    Attribute:
     Attribute Label: LENGTH
     Attribute_Definition: Length of arc feature
      Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: Length of feature
    Attribute:
     Attribute_Label: NABRGLG#
     Attribute_Definition: Internal feature number
     Attribute_Definition_Source: ArcInfo 8.1
      Attribute Domain Values:
            Unrepresentable Domain: Unique internal identification integer
    Attribute:
     Attribute Label: NABRGLG-ID
     Attribute Definition: Feature user identification number
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: User-defined identification integer
    Attribute:
     Attribute_Label: GLGCNT_IDX
     Attribute_Definition: Unique identification number
     Attribute_Definition_Source: NPS GIS-Geology Data Model
     Attribute_Domain_Values:
       Unrepresentable_Domain: Unique identification integer
    Attribute:
     Attribute_Label: GLGCNT_TYP
     Attribute Definition: Code value that designates the positional accuracy
and/or concealment of a contact/map boundary arc
     Attribute Definition Source: NPS GIS-Geology Data Model
     Attribute_Domain_Values:
        Codeset_Domain:
```

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Codeset_Name: Geologic contact/map boundary code value
          Codeset_Source: NPS Geology-GIS Data Model
    Attribute:
      Attribute_Label: FLTCNT
      Attribute_Definition: Designates contact arcs that are also geologic
faults
      Attribute Definition Source: NPS GIS-Geology Data Model
     Attribute_Domain_Values:
        Codeset Domain:
          Codeset_Name: Geologic contact/fault code value
          Codeset_Source: NPS Geology-GIS Data Model
    Attribute:
     Attribute_Label: GMAP_ID
     Attribute_Definition: Unique integer value assigned to the source map in
the GRI GMAP ID Database
      Attribute_Definition_Source: NPS GIS-Geology Data Model
      Attribute_Domain_Values:
        Unrepresentable_Domain: Unique integer value assigned to the source map
in the GRI GMAP_ID database (see <PC>MAP information look-up table)
  Detailed_Description:
    Entity_Type:
      Entity_Type_Label: nabrglg.pat/nabrglg.dbf
      Entity_Type_Definition: Area (polygon) Geologic Unit polygon attribute
table
      Entity_Type_Definition_Source: ArcInfo 8.1
    Attribute:
     Attribute Label: FID
     Attribute Definition: Feature identification number
     Attribute_Definition_Source: ArcInfo 8.1
      Attribute_Domain_Values:
            Unrepresentable_Domain: Unique feature identification integer
    Attribute:
     Attribute_Label: SHAPE
     Attribute_Definition: Representation of the entity in the data
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute Domain Values:
            Unrepresentable Domain: Shape entity type
    Attribute:
     Attribute_Label: AREA
     Attribute_Definition: Area of feature
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: Area of feature
    Attribute:
      Attribute Label: PERIMETER
     Attribute_Definition: Perimeter of feature
     Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: Perimeter of feature
    Attribute:
      Attribute_Label: NABRGLG#
     Attribute_Definition: Internal feature number
     Attribute Definition Source: ArcInfo 8.1
     Attribute Domain Values:
            Unrepresentable Domain: Unique internal identification integer
    Attribute:
      Attribute_Label: NABRGLG-ID
```

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Attribute_Definition: Feature user identification number
      Attribute_Definition_Source: ArcInfo 8.1
     Attribute_Domain_Values:
            Unrepresentable_Domain: User-defined identification integer
    Attribute:
     Attribute Label: GLG IDX
     Attribute Definition: Unique identification number
     Attribute_Definition_Source: NPS GIS-Geology Data Model
     Attribute_Domain_Values:
       Unrepresentable_Domain: Unique identification integer
    Attribute:
     Attribute_Label: GLG_SYM
     Attribute_Definition: Age-lithology symbol/code of geologic unit
     Attribute_Definition_Source: NPS GIS-Geology Data Model
     Attribute_Domain_Values:
        Unrepresentable_Domain: Geologic symbol of geologic unit
    Attribute:
     Attribute_Label: USGS_SYM
     Attribute_Definition: USGS Age-lithology symbol/code of geologic unit
     Attribute_Definition_Source: NPS GIS-Geology Data Model
     Attribute Domain Values:
       Unrepresentable_Domain: USGS Geologic symbol of geologic unit
    Attribute:
     Attribute Label: GLG AGE NO
     Attribute_Definition: Value used to age-sort geologic units from youngest
(low) to oldest (high)
     Attribute Definition Source: NPS GIS-Geology Data Model
     Attribute Domain Values:
        Unrepresentable_Domain: Age-sort number of geologic unit
    Attribute:
      Attribute_Label: GMAP_ID
      Attribute_Definition: Unique integer value assigned to the source map in
the GRI GMAP_ID Database
     Attribute_Definition_Source: NPS GIS-Geology Data Model
      Attribute_Domain_Values:
        Unrepresentable_Domain: Unique integer value assigned to the source map
in the GRI GMAP ID database (see <PC>MAP information look-up table)
    Attribute:
     Attribute_Label: HELP_ID
     Attribute_Definition: Text field used to establish a connection to a
Windows Help File to display textual and/or graphical information on map feature
      Attribute_Definition_Source: NPS GIS-Geology Data Model
     Attribute_Domain_Values:
        Unrepresentable_Domain: Text field used to 'link' to a Windows Help File
with supplementary information
Distribution Information:
 Distributor:
    Contact_Information:
      Contact_Person_Primary:
        Contact_Person: Tim Connors
        Contact_Organization: National Park Service Geologic Resources Division
      Contact_Position: Geologist
      Contact Address:
       Address_Type: mailing and physical address
       Address: 12795 West Alameda Parkway
       City: Lakewood
        State_or_Province: Colorado
```

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Postal_Code: 80227 Country: USA Contact_Address:

Address_Type: mailing address

Address: P.O. Box 25287

City: Denver

State_or_Province: Colorado
Postal_Code: 80225-0287

Country: USA

Contact_Voice_Telephone: (303) 969-2093
Contact_Facsimile_Telephone: (303) 969-6998

Contact_Electronic_Mail_Address: Tim_Connors@nps.gov

Hours_of_Service: 8:00 a.m. to 4:00 p.m. (MST), Monday - Friday Contact_Instructions: Data are available at the NPS IM GIS FTP Site:

ftp://gis01.nature.nps.gov/nabr/data/nrdata/geology/gis

Resource_Description: NABRGRE.ZIP (ArcInfo coverages) or NABRGRS.ZIP (ArcView .SHP theme files)

Distribution_Liability:

The National Park Service shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data and related graphics are not legal documents and are not intended to be used as such.

The information contained in these data is dynamic and may change over time. The data are not better than the original sources from which they were derived. It is the responsibility of the data user to use the data appropriately and consistent within the limitations of geospatial data in general and these data in particular. The related graphics are intended to aid the data user in acquiring relevant data; it is not appropriate to use the related graphics as data.

The National Park Service gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data. It is strongly recommended that these data are directly acquired from an NPS server and not indirectly through other sources which may have changed the data in some way. Although these data have been processed successfully on a computer system at the National Park Service, no warranty, expressed or implied is made regarding the utility of the data on another system or for general scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies to both to individual use of the data and aggregate use with other data. Standard_Order_Process:

Digital Form:

Digital_Transfer_Information:

Format_Name: ARC/SHP

Format_Version_Number: 8.0/3.2

 $Format_Specification: .e00 or .SHP files$

File_Decompression_Technique: No compression applied

Transfer_Size: 0.055
Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

Network_Address:

Network_Resource_Name:

ftp://gis01.nature.nps.gov/nabr/data/nrdata/geology/gis

Access_Instructions: Download metadata or WINZIP 7.0 .ZIP file with data and metadata.

Fees: None

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Ordering_Instructions: Download data at:
ftp://gis01.nature.nps.gov/nabr/data/nrdata/geology/gis
  Available_Time_Period:
    Time_Period_Information:
      Single Date/Time:
        Calendar Date: 20010301
Metadata Reference Information:
 Metadata_Date: 20011004
  Metadata_Review_Date: 20010301
  Metadata_Future_Review_Date: 20020301
  Metadata_Contact:
    Contact_Information:
     Contact_Person_Primary:
        Contact_Person: Stephanie O'Meara
        Contact_Organization: Colorado State University
      Contact_Position: Research Associate, Geologist/GIS Specialist
      Contact Address:
        Address_Type: mailing and physical address
        Address: 1201 Oak Ridge Drive, Suite 200
        City: Fort Collins
        State_or_Province: Colorado
        Postal_Code: 80525
        Country: USA
      Contact_Voice_Telephone: (970) 225-3584
      Contact_Facsimile_Telephone: (970) 225-3585
      Contact_Electronic_Mail_Address: Stephanie_O'Meara@nps.gov
     Hours of Service: 9:00 a.m. to 5:00 p.m. (MST), Monday - Friday
  Metadata Standard Name: FGDC Content Standards for Digital Geospatial Metadata
  Metadata_Standard_Version: FGDC-STD-001-1998
  Metadata_Time_Convention: local time
 Metadata_Access_Constraints: None
  Metadata_Use_Constraints: None
  Metadata_Extensions:
    Online_Linkage: http://www.esri.com/metadata/esriprof80.html
```

Profile_Name: ESRI Metadata Profile

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